UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,539	04/22/2004	William Taylor	60027.0348US01/BS# 030294	7334

7590   10/17/2007

Merchant & Gould P.C.
P.O. Box 2903
Minneapolis, MN 55402-0903

EXAMINER
SHIVERS, ASHLEY L

ART UNIT	PAPER NUMBER
4177	

MAIL DATE	DELIVERY MODE
10/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/829,539	TAYLOR ET AL.
	Examiner	Art Unit
	Ashley L. Shivers	4177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-11 and 13-26* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-11 and 13-26* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>22 April 0204</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

-- pages 1 and 15 "_____" should be changed to "10/829509".

-- pages 1 and 15 the attorney docket number "60027.0345US01/030297" should be changed to "60027.0345US01/BS#030284".

-- page 2 line 4 the "be" after "may" should be removed

-- page 2 line 30 to page 3 line 1 "The method may further include deleting the logical circuit following the end of the predetermined time period" should be removed as it is stated in a previous sentence.

-- page 8 the paragraph beginning with "The data network..." should be removed up until line 29 ending with "failover network 17" as this is not claimed or described in the drawings.

-- page 9 line 2 the "to" after "for" should be removed.

-- page 11 line 5 "with" should be changed to "which".

-- page 12 the paragraph beginning with "The network management..." should be removed up until line 13 ending with "failover network 17" as this is not claimed or described in the drawings.

Appropriate correction is required.

Drawings

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show

every feature of the invention specified in the claims. Therefore, the DLCIs, VPI/VCI,

PVCs, and SVCs must be shown or the feature(s) canceled from the claim(s). No new

matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in

reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. The

figure or figure number of an amended drawing should not be labeled as "amended." If

a drawing figure is to be canceled, the appropriate figure must be removed from the

replacement sheet, and where necessary, the remaining figures must be renumbered

and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing

date of an application must be labeled in the top margin as either "Replacement Sheet"

or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the

examiner, the applicant will be notified and informed of any required corrective action

in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3.   Claims 1, 4, 5 and 13-26 are objected to because of the following informalities:

--Claims 1, 4, 5, 15, 18, and 26 states of deleting the circuit. Examiner suggests

that the applicant change that to disconnecting the circuit.

--Claim 12 is missing. Examiner requests that applicant renumber claims 13-26 as

12-25 and amend dependencies accordingly.

--Claim 21 is dependent on itself. For examining purposes this claim will be

interpreted as being dependent on claim 20.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-11 and 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Hollman et al (**U.S. Patent No. 7,146,000**), hereinafter referred to as Hollman in

view of Chiu et al (**U.S. Patent No. 6,597,689**), hereinafter referred to as Chiu.

Regarding claim 1, Hollman teaches a method for provisioning logical circuits for

intermittent use in a data network (**See col. 3 lines 58-67**), the method comprising:

receiving at least one customer order for routing data in the data network

for a predetermined time period (**See Fig. 1, 116 and 102; col. 3 lines 58-60**);

provisioning at least one logical circuit in the data network for routing the

customer data during the predetermined time period (**See Fig. 1, 106 and 108;**

col. 3 lines 64-67);

Hollman fails to teach deleting the circuit at the end of the predetermined time

period.

Chiu teaches of deleting the at least one logical circuit at the end of the

predetermined time period (**See col. 18 lines 46-57**).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include deleting the circuit at

the end of the predetermined time period taught by Chiu in order to free up available

unused bandwidth for another perspective circuit.

Regarding claim 2, Hollman further teaches the method of claim 1, wherein

provisioning the at least one logical circuit for routing customer data during the

predetermined time period comprises provisioning the at least one logical circuit prior

to the start of the predetermined time period (**See Fig. 1, 106 and 108; col. 3 lines 64-67**).

Regarding claim 3, Hollman further teaches the method of claim 2, wherein

provisioning the at least one logical circuit prior to the start of the predetermined time

period comprises:

determining a maintenance window prior to the start of the

predetermined time period (**col. 3 lines 64-67**); and

provisioning the at least one logical circuit during the maintenance

window (**col. 3 lines 64-67**).

Regarding claim 4, Hollman again fails to teach method of claim 1 wherein the

circuit is deleted at the end of the predetermined time period.

Chiu teaches the method of claim 1, wherein deleting the at least one logical

circuit at the end of the predetermined time period comprises deleting the at least one

logical circuit following the end of the predetermined time period (**See col. 18 lines 46-

57**).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include deleting the circuit at

the end of the predetermined time period taught by Chiu in order to free up available

unused bandwidth for another perspective circuit.

Regarding claim 5, Hollman fails to teach the method of claim 4, wherein the

maintenance window is determined at the end of the predetermined time period to

delete the circuit.

Chiu teaches the method of claim 4, wherein deleting the at least one logical

circuit following the end of the predetermined time period comprises:

determining a maintenance window following the end of the

predetermined time period (**See col. 18 lines 46-57**); and

deleting the at least one logical circuit during the maintenance window

(**See col. 18 lines 46-57**).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include deleting the circuit at

the end of the predetermined time period taught by Chiu in order to free up available

unused bandwidth for another perspective circuit.

Regarding claim 6, Hollman fails to teach the method of claim 1 wherein trap

data comprises the utilization statistics for the circuit.

Chiu teaches the method of claim 1, further comprising generating trap data for

each logical circuit during the predetermined time period, wherein the trap data

comprises utilization statistics for the at least one logical circuit (**See col. 62 lines 43-46**).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include trap data comprising

utilization statistics taught by Chiu in order to provide the user with information on

how much of the network is available for further data transmission.

Regarding claim 7, Hollman fails to teach the method of claim 6, wherein the

statistics comprise percent utilization of the circuit.

Chiu states the method of claim 6, wherein the utilization statistics comprise the

percent utilization of the at least one logical circuit during the predetermined time

period (**One of ordinary skill in the art at the time the invention was made would**

have readily recognized that the statistics can be converted into percentages by

simple mathematical manipulation).

Regarding claim 8, Hollman fails to teach the method of claim 1 wherein the

customer order comprises quality of service parameters.

Chiu further teaches the method of claim 1, wherein the customer order

comprises a quality of service parameter for the logical circuit (**See col. 5 lines 7-12**).

Regarding claim 9, Hollman fails to teach method of claim 8 with the quality of

service parameters.

Chiu further teaches the method of claim 8, wherein the quality of service

parameters comprises at least one of:

an unspecified bit rate; a variable bit rate; and a committed bit rate (**See col. 5**

lines 15-19).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include the quality of service

parameters taught by Chiu in order to maintain a standard level for data transmission

during rerouting.

Regarding claims 10 and 11, Hollman also fails to teach of the circuit being a PVC or SVC.

Chiu further teaches the method of claim 1, wherein at least one of the one or more logical circuits and logical failover circuits is a permanent virtual circuit or a switched virtual circuit (**See col. 3 lines 29-31**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Hollman to include the logical circuit being a PVC and SVC taught by Chiu in order to save time establishing new circuits.

Regarding claims 13 and 14, Hollman also fails to teach of the network being a frame relay or ATM network.

Chiu further teaches the method of claim 1, wherein the data network is a frame relay network (**See col. 5 lines 38-39**) or an asynchronous transfer mode (ATM) network (**See col. 1 lines 30-32**), respectively.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Hollman to include the data network being a frame relay or ATM network taught by Chiu in order to emphasize the various types of networks that can be implemented.

Regarding claim 15, Holloman teaches a system for provisioning logical circuits

for intermittent use in a data network, the system comprising:

at least one network device for establishing a communications path for at least

one logical circuit in the data network (**See Fig. 1, 106**);

a logical element module (**See Fig. 1, 104**), in communication with the at least one

network device (**See Fig. 1, 102**), and

a network management module, in communication with the logical element

module (**See Fig. 1, 108**), for:

receiving at least one customer order for routing data in the data network

during a predetermined time period (**See Fig. 1, 116, 102**);

provisioning the at least one logical circuit for routing the customer data

during the predetermined time period (**See Fig. 1, 106 and 108; col. 3 lines 64-**

67);

Hollman fails to teach of the logical element module receiving trap data and the

network management module deleting the circuit at the end of the predetermined time

period.

Chiu teaches of a logical element module, in communication with the at least one

network device, for receiving trap data generated by the at least one network device,

wherein the trap data comprises utilization statistics for the at least one logical circuit

(**See col. 62 lines 43-46**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Hollman to include the logical element module receiving trap data taught by Chiu in order to inform the customer of traffic flow through the network.

Chiu also teaches of the network management module in communication with the logical element module for deleting the at least one logical circuit following the end of the predetermined time period **(See col. 18 lines 46-57)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Hollman to include deleting the circuit at the end of the predetermined time period taught by Chiu in order to free up available unused bandwidth for another perspective circuit.

Regarding claim 16, Hollman further teaches the system of claim 15, wherein the network management module, in provisioning the at least one logical circuit for routing customer data during the predetermined time period, is operative to provision the at least one logical circuit prior to the start of the predetermined time period **(See Fig. 1, 106 and 108; col. 3 lines 64-67)**.

Regarding claim 17, Hollman further teaches the system of claim 16, wherein the network management module, in provisioning the at least one logical circuit prior to the start of the predetermined time period, is operative to:

determine a maintenance window prior to the start of the predetermined

time period (See Fig. 1, 106 and 108; col. 3 lines 64-67); and

provision the at least one logical circuit during the maintenance window

(See Fig. 1, 106 and 108; col. 3 lines 64-67).

Regarding claim 18, Hollman fails teaches the system of claim 15 wherein the

network management module determines the maintenance window to delete the circuit

after the predetermined time period.

Chiu teaches of the system of claim 15, wherein the network management

module, in deleting the at least one logical circuit following the end of the

predetermined time period, is operative to:

determine a maintenance window following the end of the predetermined

time period (See col. 18 lines 46-57); and

delete the at least one logical circuit during the maintenance window (See

col. 18 lines 46-57).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include deleting the circuit at

the end of the predetermined time period taught by Chiu in order to free up available

unused bandwidth for another perspective circuit.

Regarding claim 19, Hollman in view of Chiu fails to teach system of claim 15, wherein the utilization statistics comprise the percent utilization of the at least one logical circuit during the predetermined time period (**One of ordinary skill in the are at the time the invention was made would have readily recognized that the statistics can be converted into percentages by simple mathematical manipulation**).

Regarding claim 20, Hollman fails to teach the system of claim 15, wherein the customer order comprises quality of service parameters.

Chiu further teaches the system of claim 15, wherein the customer order comprises a quality of service parameter for the logical circuit (**See col. 5 lines 7-12**).

Regarding claim 21, Hollman fails to teach the system of claim 20 with the quality of service parameters.

Chiu further teaches the method of claim 20, wherein the quality of service parameters comprises at least one of:

an unspecified bit rate; a variable bit rate; and a committed bit rate (**See col. 5 lines 15-19**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Hollman to include the quality of service parameters taught by Chiu in order to maintain a standard level for data transmission during rerouting.

Regarding claims 22 and 23, Hollman also fails to teach of the circuit being a PVC or SVC.

Chiu further teaches the system of claim 15, wherein at least one of the one or more logical circuits and logical failover circuits is a permanent virtual circuit or a switched virtual circuit (**See col. 3 lines 29-31**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Hollman to include the logical circuit being a PVC and SVC taught by Chiu in order to save time establishing new circuits.

Regarding claims 24 and 25, Hollman also fails to teach of the type of network being used.

Chiu further teaches the system of claim 15, wherein the data network is a frame relay network (**See col. 5 lines 38-39**) or an asynchronous transfer mode (ATM) network (**See col. 1 lines 30-32**), respectively.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Hollman to include the data network being a frame relay or ATM network taught by Chiu in order to emphasize the various types of networks that can be implemented.

Regarding claim 26, Hollman teaches a method for provisioning logical circuits

for routing logical circuit data in a data network during a predetermined time period,

the method comprising:

receiving at least one customer order for routing the logical data in the data

network during the predetermined time period (**See Fig. 1, 116 and 102; col. 3 lines 58-**

60);

determining a maintenance window prior to the start of the predetermined time

period (**See Fig. 1, 106 and 108; col. 3 lines 64-67);**

provisioning the at least one logical circuit during the maintenance window (**See**

Fig. 1, 106 and 108; col. 3 lines 64-67);

Hollman fails to teach of generating trap data with utilization statistics for the

circuit and determining a maintenance window at the end of the time period to delete

the circuit.

Chiu teaches the method of:

generating trap data for each logical circuit during the predetermined time

period, wherein the trap data comprises utilization statistics for the at least one logical

circuit (**See col. 62 lines 43-46).**

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include trap data comprising

utilization statistics taught by Chiu in order to provide the user with information on

how much of the network is available for further data transmission.

Chiu teaches the method comprising of:

determining a maintenance window following the end of the predetermined

time period (**See col. 18 lines 46-57**); and

deleting the at least one logical circuit during the maintenance window (**See col.**

18 lines 46-57).

Therefore it would have been obvious to one of ordinary skill in the art at the

time of the invention, to modify the method of Hollman to include deleting the circuit at

the end of the predetermined time period taught by Chiu in order to free up available

unused bandwidth for another perspective circuit.

Conclusion

6.   Any response to this action should be **faxed** to (571)273-8300 or **mailed** to:

> Commissioner of Patents,
> P.O. Box 1450
> Alexandria, VA 223103-1450
>
> **Hand delivered responses should be brought to:**
> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ashley L. Shivers whose telephone number is (571) 270-

3523. The examiner can normally be reached on Monday-Thursday 8:30-7:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Benny Tieu can be reached on (571) 272-7490. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AS
Art Unit 4177
10/1/2007

BENNY Q. TIEU
SPE/TRAINER